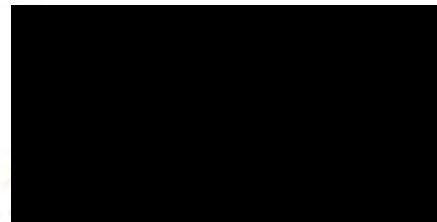
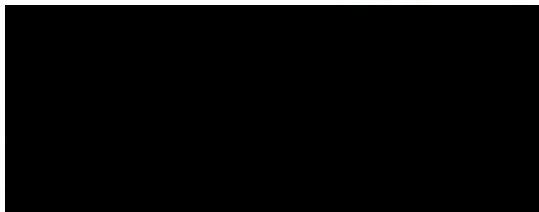




Miami-Dade Water and Sewer Department Business Plan

Fiscal Years: 2016 and 2017
(10/1/2015 through 9/30/17)

Approved by:



Plan Date: February 4, 2016

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DEPARTMENT OVERVIEW

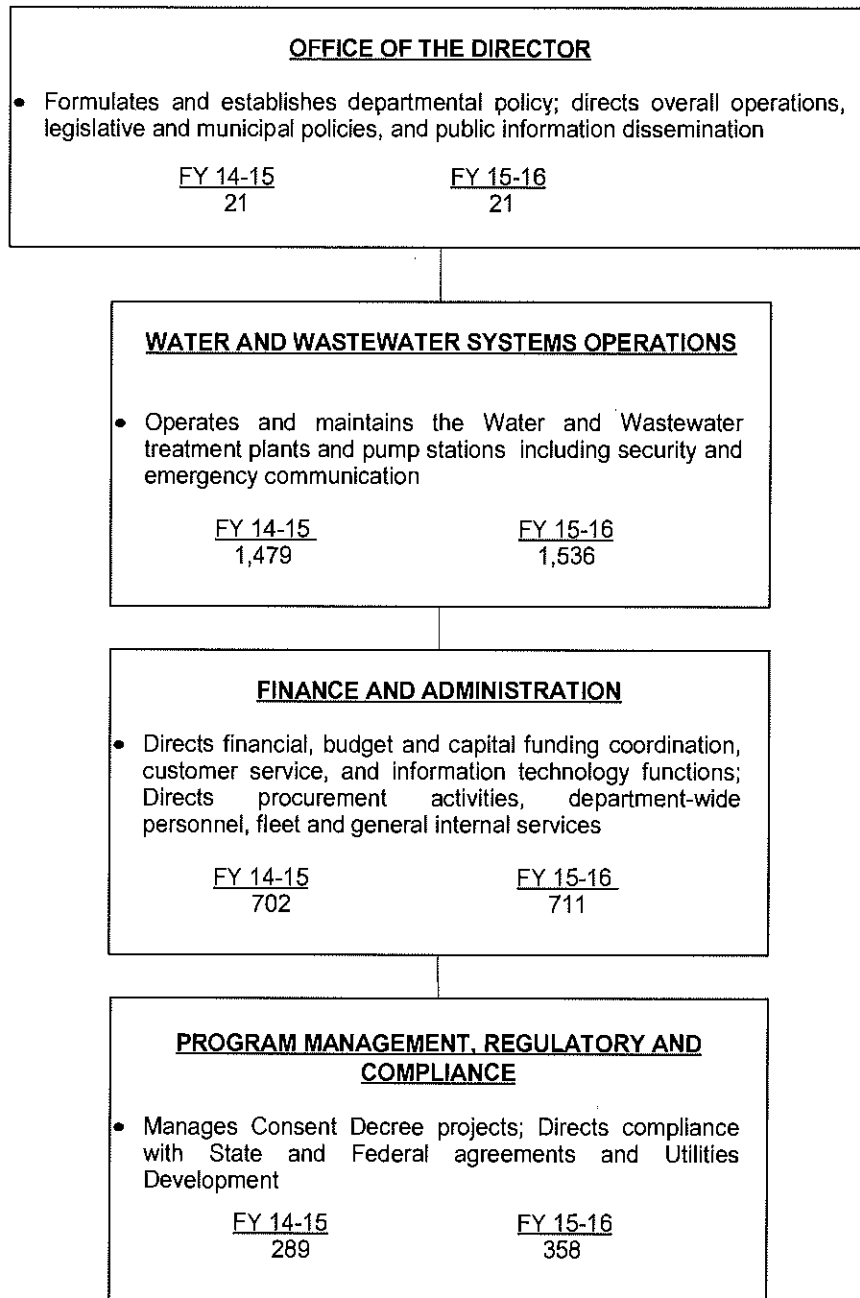
Department Mission

The Miami-Dade Water and Sewer Department is committed to serving the needs of Miami-Dade County residents, businesses, and visitors by providing high-quality drinking water and wastewater services while providing for future economic growth via progressive planning; implementing water conservation measures; safeguarding public health and the environment; and providing for continuous process improvements and cost efficiencies.

Department Description

Miami-Dade Water and Sewer Department's (MDWASD or Department, interchangeably) principal responsibilities are to provide potable water and wastewater services. This includes water supply, transmission, treatment, distribution, conservation, wastewater collection, treatment, disposal, and water reclamation. MDWASD is one of the largest public utilities in the United States, serving approximately 437,000 retail water customers and 354,000 retail wastewater customers, 15 wholesale (municipal) water customers and 13 wholesale (12 municipal and the Homestead Air Reserve Base) wastewater customers on a daily basis. The total combined population served at the retail and wholesale level is about 2.3 million residents.

Table of Organization



Strategic Alignment Summary

The Department is aligned to the following Strategic Plan goals and objectives:

N11: Responsible growth and a sustainable built environment

N11-1 Promote mixed-use, multi-modal, well designed and sustainable communities

N12: Effective Infrastructure Services

N12-1 Provide adequate potable water supply and wastewater disposal

ED5: Revitalized communities

ED5-1 Provide adequate public infrastructure that is supportive of new and existing businesses

ED5-2 Develop urban corridors (TUAs, CRAs, Enterprise Zones, NRSAs) as destination centers

GG1: Friendly Government

GG1-1 Provide easy access to information and services

GG1-2 Develop a customer-oriented organization

GG3: Efficient and effective service delivery through technology

GG3-1 Ensure available and reliable systems

GG3-2 Effectively deploy technology solutions

GG4: Effective Management Practices

GG4-1 Provide sound financial and risk management

GG4-2 Effectively allocates and utilizes resources to meet current and future operating and capital needs

Our Customer

MDWASD serves approximately 437,000 retail water customers and 354,000 retail wastewater customers, 15 wholesale (municipal) water customers and 13 wholesale (12 municipal and the Homestead Air Reserve Base) wastewater customers on a daily basis. The total combined population served at the retail and wholesale level is about 2.3 million residents.

The most important needs of our customers are to obtain potable water and dependable wastewater services at the lowest available cost.

The Retail Customer Service Division (CSD) is committed to incorporating best management practices which includes new technology to improve customer services. CSD is focusing its strategies to discover additional ways to improve efficiency, reduce operations costs, define and measure performance levels, and motivate proactive actions by employees to meet or exceed our customers' expectations for quality services.

Communicating with our customers is important to the department. In order to reach our customers at their locations, the CSD has redesigned the field notices (door hangers) to provide departmental information in a more clear, concise, and user-friendly manner.

The Department also investigates unusually high water consumption by performing an on-site investigation within two days of observation and prior to the applicable billing statement. At the time of inspection, if the customer is present, a comprehensive inspection is performed to examine possible causes. If a problem is found, it is documented by the field representative and the customer is provided with information as to what actions can be taken. If the customer is not present, efforts are made to schedule an appointment with the customer to perform a comprehensive inspection.

Currently, CSD is in the process of further developing its services provided through the Interactive Voice Recognition (IVR) system. IVR solutions include applications like Proactive Outreach Manager (POM) which provides automated outbound campaign management, enabling CSD to create and deliver automated voice, email, or standard messages that allow users to immediately choose a self-service option or interact with a live agent. These features are designed to provide our customers with a self-serving environment, reduce call wait-time, and ensure the customers' privacy.

Furthermore, the IVR will be used to place outbound calls to deliver or gather information for appointments, past due bills, and other time critical events and activities. Ultimately, the alignment of the Department's website and the IVR will automate current processes and attend to our customers faster and more efficiently.

Other new functions include CSD's implementation of the Reserved Agents Program which is activated during high wait time conditions in the Call Center; the 311 Skillset Sharing Program (Pilot) now assigned to all 311 and MDWASD agents based on knowledge and training capabilities (previously the assignment of these skillsets were segregated - hindering best management for incoming call volume); an extension of

Customer Care Hours of Operation 8:00 a.m. to 7:00 p.m. (Pilot Program) provide additional time for our customers and extend some scheduling flexibility for staff; and an Active Skillset Management Program used for forecasting and scheduling skillsets.

The three customer service centers (MDWASD Douglas Facility, South Dade Government Center, and Martin Luther King Center) are open to handle walk-in customer transactions. In an effort to enhance the customer experience, a Customer Service Coordinator is stationed at each of the office entrances to greet incoming customers and provide immediate assistance. Customers with minor transactions that can be processed via the Department's website or those wanting to make a payment are referred to the self-service kiosks located in the Customer Service Center, thereby eliminating the wait for a representative. When customers are addressed immediately, they appreciate the value the Department places on their time. To further facilitate the payment process experience and provide additional convenience to our customers, the Department has increased the number of private payment centers throughout Miami-Dade County.

The Meter Reading Section of the CSD is in the process of replacing eighty (80) existing direct read meters, located in difficult-to-read locations within the Central District boundaries, with walk-by Automated Meter Reading (AMR) technology. AMR can provide significant operating advantages including but not limited to reducing or eliminating the need to jump over 4 foot fences in order to collect readings from hard to access service points; limit worker's compensation claims; reduce reading route time; reduce number of estimated bills, cancel-and-rebills, or call-backs; and allow smooth handling of final bills and high-bill investigations or inquiries.

Another significant initiative is the use of smart water meter infrastructure. The Department has hired a consultant to develop a roadmap for the use of smart water meter technology. Smart Meters, are updated, digital meter readers that not only measure how much water is used, but also at what times during the day. Along with data management and analytical tools, Smart Meters will provide CSD a simpler more effective way for measuring, collecting and analyzing usage data at the customer, district and system levels. The data collected offers increased opportunities for customer service, conservation support, advanced operational analysis and custom reporting.

Additionally, the Meter Reading Section is in the process of upgrading its real-time Mobile Workforce Management (MWM) system application. The upgraded MWM solution will enhance customer service by providing real-time status updates of work orders to office and field staff. Additionally having real-time data improved productivity for dispatch staff as well as Meter Shop service technicians. This upgrade will address and improve various inefficiencies such as occasional delays with dispatch of work to

crews, better scheduling or routing of work which reduces travel time and other enhancements that will provide dispatchers greater flexibility and ease re-allocating work to available resources.

The Department has improved customer signage, public notification and opportunities for public feedback. The creation of customer feedback forms are used to assess strengths and weaknesses, and then adjustments to the business process or training are made as necessary, with the focus of improving the customer experience. Customer feedback cards were redesigned to target walk-in customers and determine the reason for their visit. Many customers are able to resolve their issues online, over the telephone, or by fax without having to come into one of our Customer Service Centers. By knowing the specific reason for their visit, staff can craft specific outreach efforts to educate and inform our customers on the many different ways to conduct business with the Department, specifically through online services.

The website is a central point for customers to conduct business with the department. The website has been redesigned and aligned with the other channels of communication currently provided by the Department such as voice, Interactive Voice Response System (IVR), and email to improve the customer experience and facilitate service requests. By re-aligning all its services, the Department increases its ability to communicate with and process customer service transactions. Informational on-line videos (currently posted on the Miami-Dade County portal and YouTube) promote tap water, the proper disposal of grease, how to read your meter, and how to check for leaks.

The New Customer Division's (NCD's) processes, relating to developer, business and resident first-time connection to water and wastewater service, are being overhauled for improved efficiency and customer service. With an improving local economy, the number of developer donation construction projects is increasing rapidly. MDWASD's water and wastewater mains and pump stations system have increased in size and capacity due to developers designing, building, and donating this infrastructure to the Department. In order to accomplish this, the developers rely on the Department's review/approval of determination of system points of connection, water and wastewater service agreements, plans approval, construction inspection, new mains conveyance, meter and new account establishment, and other approvals. The NCD is taking steps to improve customer service and timely delivery of services that the developers depend on. NCD has integrated with Regulatory and Economic Resources (RER) and has expanded drop off plans at the OTV (Overtown Transit Village Office) to ensure satisfaction and compliance with County Ordinances. This new process allows MDWASD and RER to simultaneously review plans.

Assistant Service Program (ASP) has been created to encourage and support applicable homeowners to be notified of required connection by County Code. This program reduces permitting time, prompts property owners that are required to connect to the water and/or sewer system to comply, improves water and sewer infrastructure's operation, and minimizes future pavement cuts and traffic disruptions at the time the customer is ready to connect.

The Division is working on enhancing its communication infrastructure to better serve all its customers. Improvements are being made to optimize the functionality of the telephone system, including automated calls to expedite service requests and greater caller menu options to assist in call routing and reduce customer wait time. The Department is also overhauling the developer and first-time connector's experience when interfacing with NCD. The improvements are designed to speed up privately-built water and sewer main projects around the County by making the developer process more efficient and customer-friendly. In part, this is being accomplished by: improving and expediting numerous approval processes; replacing the antiquated computer system; re-engineering the as-built plans process; and redesigning a more customer-friendly website that provides more online functionality.

The Department provides direct customer outreach and advertising via radio, television, print, transit bus benches, movie theatres, publications, and the internet about the Department's Multi-Year Capital Improvement Program (CIP), water quality, conservation programs, customer service programs and services. In order to continue its vision, MDWASD has planned a systematic and responsible \$13.5 billion CIP during the next 15 years. Information about the various components of the CIP has been added to the website including the Consent Decree, Ocean Outfall Legislation and Pump Station Improvement Program. In addition to traditional forms of media such as newspapers, television and radio talk shows, MDWASD also has utilized Facebook, Twitter, YouTube to capture a wider and more diverse audience.

A greater emphasis is placed on promoting the use of online services, making it more user-friendly and more transaction-oriented for customers to conduct their business 24 hours a day. Customers can pay their bill online, request paperless billing, check their usage, and request new service and disconnection, all with the click of a mouse. Advertising these services continues to be a top priority of the Department in an effort to facilitate the customer service experience. The Department also participates in numerous outreach events such as workshops, showerhead exchanges, targeted group and school meetings, and various commissioner-sponsored events to inform customers as to the benefits of the CIP.

To promote its CIP, staff has also continued to conduct targeted outreach in the communities that will be affected by the improvement project. The goal is to educate the community of the need for upgrades throughout the system as well as the need for funding. Additionally, these outreach efforts notify the community of the potential for job opportunities as a result of these projects.

During the next 15 years, the County will invest approximately \$13.5 billion to enhance and upgrade MDWASD's infrastructure utilizing state-of-the-art technology. It will be an economic engine that creates approximately 16,500 new jobs, increases service capacity that will support more businesses to open in the community, improves the reliability and sustainability of the water and sewer system, as well as generating \$24.9 billion in economic impact to the community.

MDWASD unveiled a new Departmental identifier with the tag line, "Quality. Value. Economic Growth." This identifier is clean, crisp, presents a natural association with the department and will quickly become synonymous with the great work MDWASD is doing not only in its daily business, but also the impact our future projects will make within the community for decades to come. It will become synonymous with MDWASD's commitment of providing state-of-the-art improvements and upgrades that will be designed and built on-time, on budget and always in a transparent manner.

Complementing the outreach campaign, MDWASD continues to build positive relationships with municipalities and wholesale customers through industry meetings, face-to-face interaction, training sessions, and business process reviews. To educate the public on the CIP, Consent Decree, Pump Station Improvement Program, and Ocean Outfall Legislation MDWASD has also reached out to various civic, professional and homeowner association groups.

KEY ISSUES

- The age of more than half of the existing water and wastewater infrastructure, sections of its six major treatment plants and approximately 14,500 miles of pipelines, are nearing or exceeding fifty years. For many years, maintenance has been deferred to avoid short term cost impacts, resulting in expensive equipment failures such as water and wastewater main breaks, plant failures, and decreased efficiency of operation. In some instances, fines and penalties have been imposed by regulatory agencies as a result of these failures. The dramatic failure of large diameter water and wastewater mains during the past

few years indicates that dedicated attention to the evaluation, repair, and replacement of this critical infrastructure is required. The Department has identified capital project needs of \$13.5 billion to be completed over the next fifteen years (15) for the water and wastewater infrastructure, including repair or replacement of pumps, plants, and pipes throughout the system.

- A new Consent Decree was issued on April 19, 2013, between Miami-Dade County, the United States of America, State of Florida and Florida Department of Environmental Protection for settlement of alleged violations of federal and state environmental laws related to the County's sewage system. This Consent Decree addresses capacity, management, operations and maintenance (CMOM) issues and includes a list of specific capital projects to be completed within 15 years, at a cost of \$1.6 billion. These projects are included in the FY 2015-2021 Adopted Capital and Multi Year Plan.
- Regulatory requirements in the form of consent decrees, agreements, permit conditions, and statutory changes continue to create a series of unfunded mandates that can only be met through extensive capital investment. Chief among these are state laws restricting the routine use of two ocean outfalls for treated wastewater disposal and associated requirements for wastewater reclamation and reuse, numeric nutrient criteria, more stringent water quality standards, compliance with requirements of Operation and Maintenance of Public Water Systems, including the removal of lead components in water services, and limited use of the Biscayne Aquifer to meet future water supply needs. Although some requirements were recently reduced, the Ocean Outfall Legislation has significant cost and rate implications. The 2013 revisions to the legislation, which took three years to pass through diligent efforts, resulted in \$1 billion cost avoidance to the County.
- The Department is required to be in compliance with new licensing requirements for operation and maintenance of the water distribution system. Additionally, the Department must also be in compliance with additional asbestos training/certification requirements for water and wastewater pipefitter field supervisors as well as be in compliance with additional asbestos rule requirements to protect the health and safety of its workforce and the public. Also, the Department needs to eradicate or manage asbestos containing materials throughout the aging facilities and address asbestos program management staffing needs.

- Addressing customer service is a priority for the Department. The Customer Service Unit handles over 653,000 calls annually and there is a customer wait-time which exceeds four (4) minutes. The Department has converted twelve (12) part-time positions to full-time positions to improve the response time and will review its call handling procedures to determine any other improvements that can be implemented. In addition, the Department has established a pilot project whereby 3-1-1 call center representatives will be trained to handle four specific call types. The pilot is scheduled for FY2015-16.
- Providing adequate trained and licensed staffing to meet all the regulatory requirements is of grave concern. Late in FY 2014-15, the Department began to address this concern, by securing approval for approximately 135 overages needed to support the anticipated staffing shortfall addressed in Capacity, Management, Operations and Maintenance (CMOM) reports, operational workload increase, and also the number of vital staff, executives, and management preparing for retirement. The overage positions also addressed assistant director level positions to ensure appropriate transfer of knowledge. Overages granted in FY 2014-2015 were also adopted as an additional 135 positions to the FY 2015-16 Department's Table of Organization count from 2,491 to 2,626, allowing the Department to continue to smoothly transition overages into permanently budgeted positions for FY2015-16. During the next fiscal year Woolpert, Inc. has been tasked in evaluating overall wastewater system staffing recommendations, and an appropriate implementation plan. Water system staffing recommendations are also being review according to operational procedures that are being evaluated and standardized.
- Increasing the efficiency of all functions that depend on the efficiency of other departments can save substantial time and resources. This is particularly the case with procuring equipment and services unique to operations. Replacement of aging and worn out equipment and vehicles provides an opportunity for increased fuel efficiencies, reduced greenhouse gas emissions, and better air quality. It is necessary to provide the resources needed to address the future demands of repairs to aging infrastructure, as well as reduce the downtime and costly recurring repairs. Two successful approaches that have demonstrated improved efficiencies are capital projects managed under the expedited process and the use of a pre-qualified consultant and contractor pools to limit the time required to address emergency situations and for smaller construction projects. Meeting MDWASD's infrastructure needs and regulatory requirements implies the need for greater efficiencies in project implementation and more intensive

project management to establish and maintain schedules and quality control as the number of projects increases to meet all requirements.

- Adequate funding and appropriate rates are required in order to implement the Business Plan. The regulatory requirements, including the 20-Year Water Use Permit conditions, state mandated Ocean Outfall requirements, Consent Decrees, other regulatory requirements, as well as the need to replace the aging infrastructure, require significant increases in funding. The new Consent Decree consists of wastewater system rehabilitation and improvement projects that have been identified and estimated at \$1.6 billion. As indicated previously, the Department has identified more than \$13.5 billion of water and wastewater capital projects that are needed to upgrade the system and meet all requirements. Funding of this work is dependent on the water and wastewater rates, which rely solely on the customers who have benefited from low rates for many years.
- Additionally, the Department needs to maintain and moderately replenish non-required reserve levels in order to reduce the cost of issuing debt for all capital needs. Rating agencies evaluate the Department's published rate increases and reserve levels periodically. They perceive a decline in fund balance (reserves) as a negative financial indicator, and as a result, may revise the Department's debt outlook or bond ratings. Lower reserve levels are considered a greater risk to the Department, as it will be unable to respond to unexpected events.
- Systems automation for most aspects of operations, including budget and accounting, customer information, geographic information systems, enterprise asset management, system control data, project tracking, schedules, security, and metering requires constant attention, training, and funding. This is particularly critical as many long-term Department employees will be retiring and take with them their extensive system knowledge that needs to be captured and made accessible throughout the organization. Technology changes are introduced by hardware and software suppliers, as well as internal business improvements, regulations, and expanded customer expectations. Although newer technology is often better than current tools, it places a burden on both the workforce adapting to the change and the Information Technology team delivering the support that must be managed. Orchestrating these changes require significant planning to ensure a smooth transition. These systems require continuous maintenance and employee training to be effective.

- Developer donations of water and wastewater infrastructure and timely processing are of key importance to the Department. The New Customer Division is assertively working on customer service improvements as noted in the Customer section above. The Department needs to keep pace with the development in the community and the water and wastewater infrastructure projects that become a part of the Department's water and wastewater Systems. The Consent Decree calls for maintenance of the Department's wastewater transmission and collection system (WCTS) hydraulic computer model. The consultant selected for program management of the Consent Decree is charged with this work regarding the WCTS. This work and the equivalent for the Department's water transmission and distribution system are critical for the determination of capacity for developers, as well as for long range planning and optimal system operation.

PRIORITY INITIATIVES

- Ensure compliance with the Consent Decree capital projects at the North, Central, and South District Wastewater Treatment Plants; the Wastewater Collection System, including Norris Cut Force Main Replacement; and the Pump Station System. In addition, ensure compliance with the Capacity Management Operation and Maintenance (CMOM) requirements, including Wastewater Overflow Response Plan, Information Management System Program, Wastewater System Asset Management Program, a Gravity Wastewater System Operation and Maintenance Program, Pump Station Operations and Preventive Maintenance Program, Force Main Operations, Preventive Maintenance and Assessment/Rehabilitation Program, Force Main Rehabilitation Replacement Program, Wastewater Operations and Maintenance Program, and the Financial Analysis Program.
- Ensure compliance with the 20-year Water Use Permit (WUP); including alternative water supplies (AWS), water conservation, and water loss reduction projects; the Northwest Wellfield Surface Water Treatment Plant (WTP) for the Hialeah/Preston service area; adequate wastewater transmission capacity; groundwater studies for the North and South District Wastewater Treatment Plants; Infiltration and Inflow Program; Brickell, Doral, and Biscayne Boulevard basin wastewater improvements; and the Integrated Water and Wastewater Master Plan to address system needs for future growth, including the State Outfall Legislation, climate change, and sea level rise.

- Provide adequate water and wastewater capacity to support development, by continuing with the implementation of the water supply certification program, water and wastewater capacity analysis, and expedite the implementation of remedial plans for wastewater pump stations under moratorium, which are located in areas with higher potential for development. Aging equipment and pipes, paired with operation and maintenance issues, have caused close to one hundred and fifty pump stations to be out of compliance with the requirements of the Consent Decree; leaving large areas of the County under a development moratorium. Moratoria impedes the economic development in the service areas of these pump stations. The Pump Station Improvement Program (PSIP) continues to be implemented to quickly and effectively reduce the number of out-of-compliance pump stations in order to provide better service to the public. The Department has a consultant to provide program and construction management services to assist with implementation of this initiative. In addition, with expansion of the already effective Wastewater Collection System Infiltration and Inflow reduction (I/I) program, collection system efficiencies will be improved, moratoriums avoided, and capital improvements deferred or reduced in scope.
- Ensure compliance with Ocean Outfall Legislation (OOL). In 2008, the Florida legislature approved and the Governor signed into law requiring that all wastewater utilities in Southeast Florida that use ocean outfalls to dispose of treated wastewater to reduce nutrients discharges by 2018, cease the use of outfalls by 2025, and reuse 60 percent of the wastewater flows by 2025. As a result, MDWASD is implementing system wide wastewater facility upgrades through the OOL program. These upgrades include building one new wastewater treatment plant and reducing flows to two existing treatment plants.
- Ensure implementation of the projects identified in the report "Sewer Service to Commercial Properties in Miami-Dade County", which were ranked by the Department of Regulatory and Economic Resources, and based on the allocation of \$126 million from Building Better Communities General Obligation Bond Program, approved by the Board of County Commissioners.
- Establish a bond-funded program specifically targeting critical infrastructure replacement to reduce the instances of pipeline and plant component failures that can endanger public health, create economic disruption, and substantially increase the cost of facility management.
- Ensure implementation of the projects in the Multi-Year Capital Improvement Plan (CIP) to provide adequate facilities to meet capacity requirements, comply

with regulations and infrastructure renewal and replacement as well as the support systems associated with implementation, including climate change mitigation and adaptation strategies. Included is the development of more detailed project scheduling to identify key milestone dates in the completion of projects, for improved forecasting of resources needed for the work, and to form the basis for improved tracking of the phases of the projects comprising the CIP to ensure timely project delivery and use of associated funds appropriated.

- Continue to implement the comprehensive Lead Service Replacement Program to systematically eliminate lead from water service piping and fittings in compliance with state and federal regulations.
- Continue to implement the Small Diameter Water Main Replacement Program to systematically replace undersized water mains that are not providing adequate water pressure, fire flows, and to eliminate leaks. Eliminating these leaks will assist in achieving compliance with the water use permit.
- Continue to operate and use the methane gas generated at the Central District and South Wastewater Treatment Plants for conversion into electricity and continue to operate and use the methane gas generated at the landfill for conversion into electricity at the South Dade Wastewater Treatment Plant.
- Continue implementation of the "Water and Wastewater Infrastructure Service Improvement Plan" to encourage and support applicable homeowners notified of required connection by County Code. This is in support of Regulatory and Economic Resources (RER) efforts to reduce permitting time, while providing well intrusions to property owners required to connect to the water and/or wastewater system, improving water and wastewater infrastructure's operation, and avoiding future pavement cuts and traffic disruptions at the time the customer requests connections. Developers installing services and laterals will be compensated by a set fee under the Additional Services Program (ASP). The Department will continue and expand the integration between New Customer Division (private development work) and Engineering Division Utility Coordination (public right of way agencies' work) by use of the Geographic Information System (GIS) system and coordination with roadway agencies to minimize pavement cuts and traffic disruptions within our service area.
- Ensure implementation of key automated support systems to meet consent decree requirements, including continuation of CMOM Programs, the Pump Stations Monitoring Program and Wastewater Collection System Model by

provisioning the infrastructure required and supporting enterprise systems that produce operating data. Continue to upgrade the cycle of enterprise systems and expansion of the Advanced Meter Infrastructure (AMI) project, which is under pilot test in Miami Springs. Evaluate New Business processes to select a new information system that will meet customer needs and will be integrated with the County-wide construction and permitting functions as a comprehensive and integrated solution is planned. Ensure implementation and expansion of the Supervisory Control and Data Acquisition System (SCADA) as recommended by the assessment study completed, including SCADA system Master Plan. Included is the expansion of the use of automatic control using SCADA throughout the entire Department water and wastewater systems to increase efficiency and reduce costs.

- Implement a comprehensive staffing and succession plan to mentor, train, and transfer historical knowledge to new employees before retirement of existing staff.
- Continue to implement efficiency initiatives, sustainability measures, process improvements, and other performance excellence initiatives through direct engagement with frontline staff to facilitate implementation of the business plan, building on the successful experience of its Efficiency Savings Program, resulting in savings of more than \$38.1 million from employee driven process improvements since 1998.

FUTURE OUTLOOK

3 to 5 Year Financial Outlook

In order to implement the Business Plan, it is evident that the Department will need to obtain adequate funding to provide for future growth, meet all the regulatory requirements, including the 20-Year WUP and conditions, state-mandated OOL, consent decrees, other regulatory requirements, improve wastewater system performance during peak rainfall events and the need to rehabilitate and replace aging infrastructure. The impact of the regulatory requirements and aging infrastructure will significantly increase the cost of water and wastewater services for both retail and wholesale customers. The Board of County Commissioners passed Resolution 444-13 authorizing a water and wastewater retail rate increase of eight percent effective October 1, 2013, and Ordinance 14-92 authorizing a six percent retail rate increase and a four percent water and wastewater wholesale rate increase effective October 1, 2014,

to support the increased cost of operations and maintenance, and to fund debt issuances necessary to complete capital projects for regulatory compliance, aging infrastructure, and plant rehabilitation. Future water and wastewater retail and wholesale rate increases are also projected to fund the Multi-Year Capital Improvement Plan (CIP).

The Consent Decree was negotiated with the Federal Environmental Protection Agency (EPA) and the State of Florida Department of Environmental Protection that addresses regulatory violations resulting from failing infrastructure at an estimated cost of \$1.6 billion; the Consent Decree was adopted by the Board of County Commissioners on May 21, 2013; all projects are currently included in the multi-year capital plan; increased debt requirements will require future rate adjustments.

The Department's CIP includes the testing and replacement as needed of all large diameter concrete water and wastewater pipes; substantial overhauls of all the water and wastewater plants; reconstruction of nine seriously deteriorated sewage pump stations and capacity expansion of more than 100 pump stations to accommodate additional flows; installation of redundant water supply mains and storage tanks to ensure continuous delivery of water even when pipe failures occur; planning and design of extensive changes to the wastewater system required to satisfy the State mandate to eliminate use of the ocean outfalls for disposal of treated wastewater and the reuse of 60% of that water; and completion of water supply projects required in the State Water Use Permit to meet service demands in the future. Customers may see a significant increase in water and wastewater rates; current estimates project the increases will range between 100% to over 250% of the current rates within the next 10 years.

Nation-wide, water and wastewater utilities of comparable size experienced a Maintenance Index of 5.5 percent average during the first three quarters of 2015; based on the United States Department of Labor, Bureau of Labor Statistics, 2015 Consumer Price Index (CPI), All Urban Consumers, Water and Sewerage Maintenance U.S. city average. Future rate increases to retail and wholesale customers are critical to fund the Capital Improvement Plan and additional operating expenses that relate to improvements. The water system infrastructure averages 45 years with the oldest pipes in the system dating back to the mid 1920's. Similarly, the wastewater infrastructure averages 55 years with the oldest pipes in the system dating back to the 1930's or earlier.

MDWASD has identified the need to replace or rehabilitate approximately 2,600 miles of the total 6,300 miles of wastewater pipes. Similarly, the Department has identified 160 miles of sewage pipes that needs to be rehabilitated along with the Consent Decree

estimated at \$1.6 billion. The Central District Wastewater Treatment Plant, a large portion was constructed in the 1950's, processes the largest volume of wastewater flows for the Department on a daily basis; the plant's age and corrosion due to its proximity to the Atlantic Ocean continues to require extensive equipment and structural repairs to meet operational demands and regulatory requirements.

On June 4, 2013, the Board of County Commissioners adopted Ordinance 13-47 authorizing the issuance of Miami Dade County Water and Sewer systems bonds (not to exceed \$4.245 billion in multiple bonds). These multiple bond issues will fund the cost of the capital improvement plan including aging infrastructure that is more than 50 years old and upgrades to comply with a portion of the Consent Decree between the EPA, Florida Department of Environmental Protection (FDEP) and the County. In addition, proceeds will fund capital interest, reserve funds and cost of issuances.

Series 2013A for \$345.2 million Bonds issued on August 2, 2013, is the first of the multiple bonds issues authorized through Ordinance 13-47. This issuance provided \$300 million for capital project funding. Series 2013B Revenue Refunding Bond for \$162.1 million was issued to refund Series 1999A; this bond series is estimated to provide the Department a savings of approximately \$26.5 million over the next 16 years.

Series 2015 Revenue Refunding Bond for \$481.2 million was issued, and adopted by the Board of County Commissioners on April 21, 2015 as Resolution R-298-15. The 2015 Series Bond allows the Department to realize estimated savings of \$47.8 million through FY 2026, through the refunding of Series 2007, and Series 2008C.

In FY 2015-16, the Department anticipates the need for additional funding for capital projects in the CIP.

Ordinance 13-47 also strengthens the Department's rate covenant whereby the County promised to maintain net operating revenues in each fiscal year at least equal to 125 percent of the debt service requirement; previously the rate covenant was 110 percent. Rating agencies view higher rate covenants to be more robust when compared to other highly rated water and wastewater authorities. In addition, this higher rate covenant is also a way to improve the Department's legal credit structure.

As is customary during the annual budget process, the Department will be looking for innovative ways to reduce the fiscal impact to its customers. The Department has started a significant effort to find competitive approaches to addressing these needs in the most cost effective manner while maintaining regulatory compliance. The Department continually reviews both its organizational structure and related business

process in order to review costs and/or increase revenue collection. As these approaches are identified, the Department, along with the Office of Management and Budget and the Mayor's Office, will continue to present the proposals to the BCC for final determination.

Scorecard

Water and Sewer Department (FY 2015-2016)

The Miami-Dade Water and Sewer Department (MDWASD) is a proprietary fund county department established to provide water and wastewater services throughout Miami-Dade County. The services consist of water treatment, transmission, and distribution, and wastewater collection, treatment, and disposal.

Sole, Lester

1.0 Customer

Objective

1.1 Maintain high level of responsiveness to customer service requests (WASD)

Description

Owners

Aguir, Luis (WASD);
Garcia, Marcelo M. (WASD);
Lovett, Rodney J. (WASD);
Diaz, Raymond D. (WASD); Mendez, Jorge
Arias, Ruben J. (WASD)

Grandparent Objectives

Description

Owners

GG1 Friendly government

Miami-Dade County

Parent Objectives

Description

Owners

GG1-1 Provide easy access to information and services

Miami-Dade County

GG1-2 Develop a customer-oriented organization

Miami-Dade County

Measures Linked to Objective

Percent of all non-emergency requests/calls dispatched in less than 3 business days

Period

Actual

Target

Variance

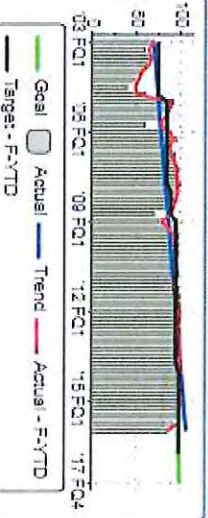
Owners

16 FQ1
86.34%
(163.00 / 181.00)

88.00%

-12.66%
Garcia, Marcelo M. (WASD);
Zelaya, Holman (WASD)

% of time <3days to reply to customer not



Response time to sewage overflows

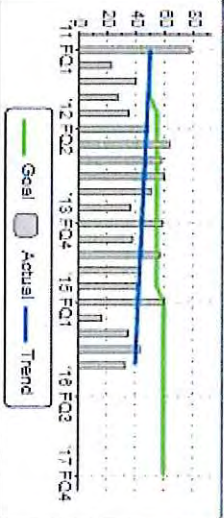
16 FQ1

23 min

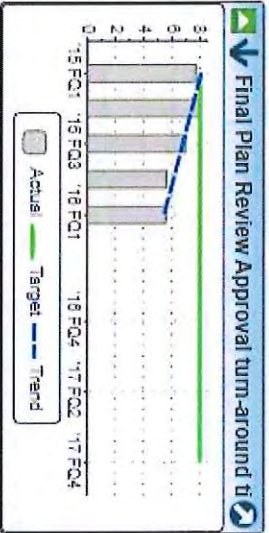
80 min

27 min Lovett, Rodney J. (WASD)

Response time to sewage overflows

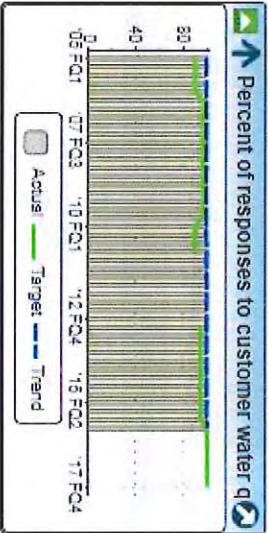


Final Plan Review Approval turn-around time (City) ☒ '16 FQ1 6 Days 3 Days 2 Days Garcia, Sergio (WASD); Arias, Ruben J. (WASD)



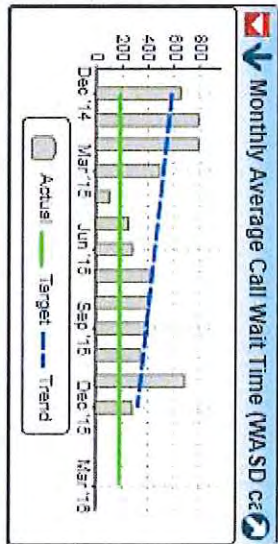
Child Measures	Period	Actual	Target	Variance	Owners
Final Plan review approval turn-around time (Monthly)	Dec 15	4days	3days	4days	Garcia, Sergio (WASD); Figueroa, Luis (WASD)

Percent of responses to customer water quality complaints per Lab Section in <24 hrs ☒ '16 FQ1 100.00% 100.00% 0.00% Diaz, Raymond D. (WASD); Toledo, Andy W.



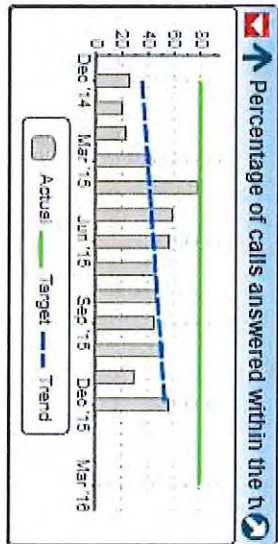
Objective	Description	Owners
1.2 Continue to make information available to customers in a timely manner (WASD)		Mendez, John
Grandparent Objectives	Description	Owners
GG1 Friendly government		Miami-Dade County
Parent Objectives	Description	Owners
GG1-1 Provide easy access to information and services		Miami-Dade County
GG1-2 Develop a customer-oriented organization		Miami-Dade County

Measures Linked to Objective					
Average Wait Time Per Call monthly (WASD- Retail Customer Service)		Dec '15	Actual	Target	Variance
			282 sec	180 sec	-102 sec
					Jordan, Juliette (WASD); Mens, Jason J. (WASD)

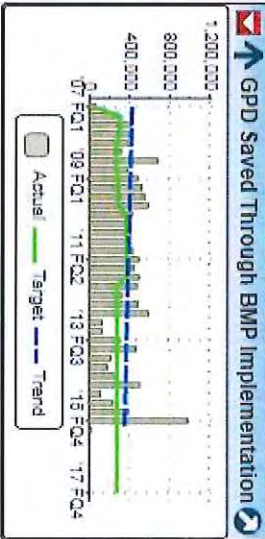


Child Measures					
Calls Received (monthly) (Retail)	Dec '15	Period	Actual	Target	Variance
			27,318	n/s	n/s
					Jordan, Juliette (WASD); Mens, Jason J. (WASD)
Number of walk-in customers	Dec '15		5,174	n/s	n/s
					Jordan, Juliette (WASD); Mens, Jason J. (WASD)
Number of web mail requests	Dec '15		4,622	n/s	n/s
					Jordan, Juliette (WASD); Mens, Jason J. (WASD)

Initiatives Linked to Measure					
WASD: Call Center Review	10/1/2014	Est Start	9/30/2015	Est End	Type
			8/7/2016	As Of	%
					100%
					Complete
					Avalos, Lourdes (ONIS)
Percentage of calls answered within the two-minute threshold (monthly)	Dec '15		58.00%	80.00%	-21.00%
					Jordan, Juliette (WASD); Mens, Jason J. (WASD)



Initiatives Linked to Measure					
WASD: Call Center Review	10/1/2014	Est Start	9/30/2015	Est End	Type
			8/7/2016	As Of	%
					100%
					Complete
					Avalos, Lourdes (ONIS)

Objective		Description		Owners					
1.3 Ensure compliance with 20-Year Water Use Permit		On November 15, 2007, the South Florida Water Management District issued a 20-year Water Use Permit to the County, including, but not limited to, the implementation of the Alternative Water Supply Plan (AWS). The permit provides the water allocation needed for the County to have adequate water supply		Goldenberg, Bertha M. (WASD); O'Rourke, Richard M. (WASD); Neganbar, Sherry (WASD)					
Grandparent Objectives		Description		Owners					
N1.2 Effective infrastructure services				Miami-Dade County					
Parent Objectives		Description		Owners					
N1.2-1 Provide adequate potable water supply and waste water disposal				Miami-Dade County					
Initiatives Linked to Objective		Est. Start	Est. End	Type	As Of		%	Status	Owners
Hialeah Floridan Aquifer Reverse Osmosis Monitor Phase 1 : (AWS) Alternative Water Supply Project Development Program		11/15/2007	12/30/2014		11/17/2013				Goldenberg, Bertha M. (WASD)
Hialeah Floridan Aquifer Reverse Osmosis WTP Phase 1-3 (sorte)		8/18/2010	12/31/2015		1/27/2016				35% In Progress Aguilar, Luis (WASD); Jalonek, Peter M. (WASD)
South Miami Heights Water Treatment Plant		1/22/2013	12/31/2018		1/22/2016				20% On Hold Aguilar, Luis (WASD); Garcia, Mario (WASD); Williams, Sonia (WASD)
Measures Linked to Objective		Period		Actual	Target	Variance		Owners	
Gallons of water saved per day (GPD) through implementation of the Water Use Efficiency Plan		16 FQ1		24,555GPD	281,000GPD	-256,345GPD		Martin, Patrick (WASD)	
									
Initiatives Linked to Measure		Est. Start	Est. End	Type	As Of		%	Status	Owners
Water Use Efficiency 20-Year Plan		10/2/2006	9/28/2027		12/31/2015				38% In Progress Goldenberg, Bertha M. (WASD); Martin, Patrick (WASD)

20-YR WUP Compliance Rate (in percent %)



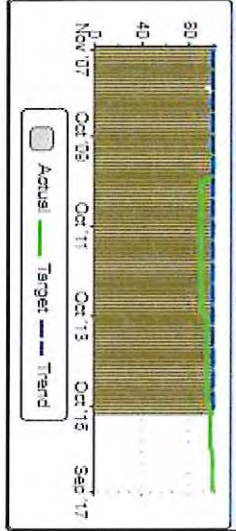
Dec '15

100.0%

98.0%

2.0% Goldenberg, Berna M. (WASD)

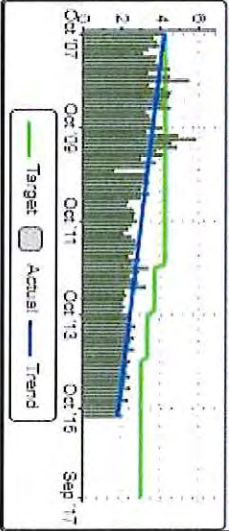
20-YR WUP Compliance Rate (in percent %)



Child Measures

Child Measures	Period	Actual	Target	Variance	Owners
Master Planning Section Compliance Rate (%)	Dec '15	100.0% (31.0/31.0)	100.0%	0.0%	Fallon Jr., Howard J. (WASD); Goldenberg, Berna M. (WASD); Edwards, Daniel J. (WASD)
Water Production and Maintenance Division WUP-Compliance Rate (%)	Jan '16	100.0% (31.0/31.0)	100.0%	0.0%	Balwin, Arthur L. (WASD)
WUP-Water-Use Efficiency Section Compliance Rate (%)	Dec '15	100.0% (31.0/31.0)	100.0%	0.0%	Goldenberg, Berna M. (WASD); Martin, Patrick (WASD)
Regulatory Compliance and Monitoring Division Compliance Rate (%)	Dec '15	100.0% (31.0/31.0)	100.0%	0.0%	O'Rourke, Richard M. (WASD); Neganthan, Sherry (WASD)
Water Resources Section Compliance Rate (%)	Dec '15	100.0% (31.0/31.0)	100.0%	0.0%	Walsh, Virginia (WASD); Fallon Jr., Howard J. (WASD)
Water Distribution Integrity Rate (%) (Monthly)	Dec '15	2.02 (186.00/8,208.00)	3.03	-1.01	Aguilar, Luis (WASD); Marrows, Daniel T. (WASD)

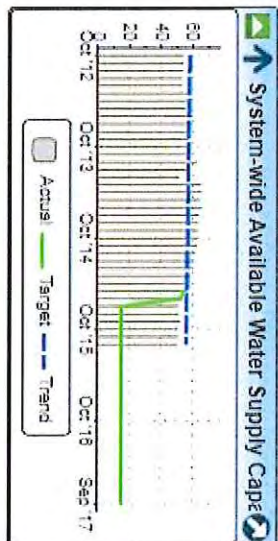
Water Distribution Integrity Rate (%) (Sort)



Child Measures	Period	Actual	Target	Variance	Owners
Leak Ratio (%) (AWWA) (per 100 Miles of Pipe)	Dec '15	1.66 (196.00 / 8,206.00)	n/s	n/s	Myles, John E. (WASD); Matthews, Daniel T. (WASD)
Number of Water Leaks	Dec '15	136	n/s	n/s	Myles, John E. (WASD); Matthews, Daniel T. (WASD)
Breaks Ratio (%) (AWWA) (Per 100 Miles of Pipe)	Dec '15	0.366 (30.000 / 8,206.00)	n/s	n/s	Myles, John E. (WASD); Matthews, Daniel T. (WASD)
Number of Water Pipeline Breaks	Dec '15	30	n/s	n/s	Myles, John E. (WASD); Matthews, Daniel T. (WASD)
WASD Water Pipe Surveyed	'16 FQ1	1,453mi	2,133mi	-680mi	Llewellyn, Lancelot (WASD); Matthews, Daniel T. (WASD); Garcia, Antonio (WASD)
% of emergency requests to repair water leaks responded to within one hour	'16 FQ1	72% (90 / 125)	80%	12%	Myles, John E. (WASD); Matthews, Daniel T. (WASD)
Average response time to emergency requests to repair water leaks	'16 FQ1	9min	60min	51min	Myles, John E. (WASD); Matthews, Daniel T. (WASD)
Average response time to non-emergency requests to repair water leaks	'16 FQ1	14days	14days	14days	Myles, John E. (WASD); Matthews, Daniel T. (WASD)
Average response time to Leak Detection Unit requests to repair water leaks	'16 FQ1	14days	14days	14days	Myles, John E. (WASD); Matthews, Daniel T. (WASD)

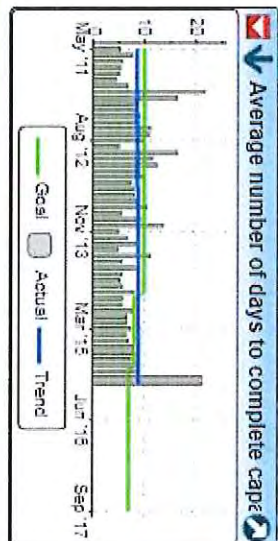
Objective	Description	Owners					
1.4 Ensure Adequate Water and Wastewater Capacity (N1.2-1)		Goldenberg, Berna M. (WASD)					
Grandparent Objectives	Description	Owners					
GG1 Friendly government		Miami-Dade County					
N1.1 Responsible growth and a sustainable built environment		Miami-Dade County					
Parent Objectives	Description	Owners					
GG1-1 Provide easy access to information and services		Miami-Dade County					
N1-1 Promote mixed-use, multi-modal, well designed and sustainable communities		Miami-Dade County					
Initiatives Linked to Objective	Est. Start	Est. End	Type	As Of	%	Status	Owners
Pump Station Improvement Program (PSIP)	10/1/2012	12/31/2018		1/12/2016	37%	In Progress	Roque, Rolando M. (WASD)

Measures Linked to Objective	Period	Actual	Target	Variance	Owners
System-wide Available Water Supply Capacity from the Biscayne Aquifer	Dec '15	48.88MGD	16.00MGD	34.89MGD	Valdes, Maria A. (WASD)



Child Measures	Period	Actual	Target	Variance	Owners
Number of projects reviewed for Water Supply Certification	Jan '16	494	n/a	n/a	Valdes, Maria A. (WASD)

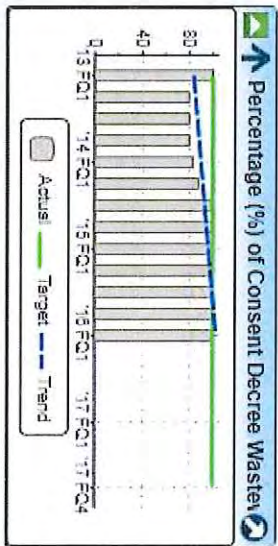
Average number of days to complete capacity evaluations per month.	Dec '15	21.1days	7.0days	-14.1days	Fallon Jr., Howard J. (WASD); Edwards, Daniel J. (WASD); Vasquez, Oscar R. (WASD)
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Child Measures	Period	Actual	Target	Variance	Owners
Number of capacity evaluations completed per month	Dec '15	18	n/a	n/a	Fallon Jr., Howard J. (WASD); Edwards, Daniel J. (WASD); Vasquez, Oscar R. (WASD)

Objective	Description	Owners
1.5 Ensure timely completion of Consent Decree Wastewater Capital Improvement projects (N12-1)		Moncholi, Manuel E. (WASD); Edwards, Daniel J. (WASD)
Grandparent Objectives	Description	Owners
N12 Effective infrastructure services		Miami-Dade County
Parent Objectives	Description	Owners
N12-1 Provide adequate potable water supply and waste water disposal		Miami-Dade County

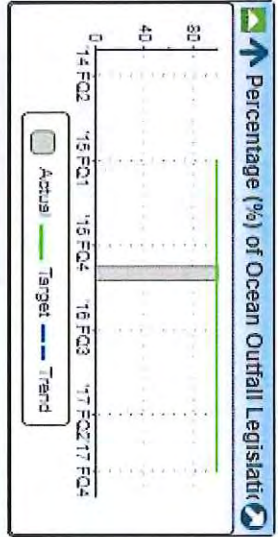
Measures Linked to Objective									
Percentage (%) of Consent Decree Wastewater Projects on or before Schedule (sortie)		Period	Actual	Target	Variance	Owners			
Percentage (%) of Consent Decree Wastewater Projects on or before Schedule (sortie)	100.0%	16 FQ1	100.0%	100.0%	0.0%	Moncholl, Manuel E. (WASD) Edwards, Daniel J. (WASD)			



Child Measures	Period	Actual	Target	Variance	Owners
Percentage (%) of SDWMTF Consent Decree Projects on or before Schedule	16 FQ1	100.0% (8.0 / 8.0)	100.0%	0.0%	Moncholl, Manuel E. (WASD)
Percentage (%) of CDWMTF Consent Decree Capital Wastewater Projects on or before Schedule	16 FQ1	100.0% (21.0 / 21.0)	100.0%	0.0%	Moncholl, Manuel E. (WASD)
Percentage (%) of NDWMTF Consent Decree Capital Improvement Projects on or before Schedule	16 FQ1	100.0% (9.00 / 9.00)	100.0%	0.0%	Moncholl, Manuel E. (WASD)
Percentage (%) of Wastewater Collection & Transmission Line Consent Decree Projects on or before Schedule	16 FQ1	100.0% (10.0 / 10.0)	100.0%	0.0%	Edwards, Daniel J. (WASD)
Percentage (%) of Sewer Pump Station System Consent Decree Projects on or before Schedule	16 FQ1	100.0% (18.0 / 18.0)	100.0%	0.0%	Edwards, Daniel J. (WASD)
Percentage of Supplemental Environmental Projects on or before Schedule	16 FQ1	100.0% (1.00 / 1.00)	n/a	n/a	Edwards, Daniel J. (WASD)

Objective	Description	Owners
1.6 Ensure timely completion of Coastal Improvement Projects related to the Ocean Outfall Legislation Program (NI2-1)		Smith, Isaac (WASD)
Grandparent Objectives	Description	Owners
NI2 Effective infrastructure services		Miami-Dade County
Parent Objectives	Description	Owners
NI2-1 Provide adequate potable water supply and waste water disposal		Miami-Dade County

Measures Linked to Objective					Period	Actual	Target	Variance	Owners
Percentage (%) of Ocean Outfall Legislation (OOL) Projects on Schedule					'16 FQ1	100.00%	100.00%	0.00%	Smith, Isaac (WASD)
						(9.00 / 9.00)			



Child Measures	Period	Actual	Target	Variance	Owners		
Percentage (%) of West District Ocean Outfall Legislation (OOL) Projects on Schedule	'16 FQ1	100.00% (1.00 / 1.00)	100.00%	0.00%	Smith, Isaac (WASD)		
Percentage (%) of Central District Ocean Outfall Legislation (OLL) projects on schedule	'16 FQ1	100.00% (3.00 / 3.00)	100.00%	0.00%	Smith, Isaac (WASD)		
Percentage (%) of Wastewater Collection and Transmission Lines Ocean Outfall Legislation (OLL) Projects on Schedule	'16 FQ1	100.00% (3.00 / 3.00)	100.00%	0.00%	Smith, Isaac (WASD)		
Percentage (%) Sewer Pump Stations System Ocean Outfall Legislation Projects on Schedule	'16 FQ1	100.00% (2.00 / 2.00)	100.00%	0.00%	Smith, Isaac (WASD)		
Initiatives Linked to Measure	Est. Start	Est. End	Type	As Of	%	Status	Owners
Implementation of Ocean Outfall Legislation Program	3/1/2013	1/7/2026		1:29/2016	2.5%	In Progress	Smith, Isaac (WASD)

2.0 Financial

Objective	Description	Owners
2.2 Meet Budget Targets (Water and Sewer) (GG4-2)		Suarez, Maria C. (WASD); Morris, Frances G. (WASD)
Grandparent Objectives	Description	Owners
GG4 Effective management practices		Miami-Dade County
GG4-2 Effectively allocate resources to meet current and future operating and capital needs		Miami-Dade County
2.2.2003 Planned necessary resources to meet current and future operating and capital needs (priority outcome)	Planned necessary resources to meet current and future operating and capital needs	Admin, Admin

Parent Objectives	Description	Owners
GG4-1 Provide sound financial and risk management		Miami-Dade County
GG4-2 Effectively allocate resources to meet current and future operating and capital needs		Miami-Dade County
Meet Budget Targets - Archived		Office of Management and Budget
Meet Budget Targets (All Miami-Dade County)	This is the parent objectives to all departmental "Meet Budget Targets" objective. This is the child objective to the County's Strategic Plan Objective, "GG4-2: Effectively allocate and utilize resources to meet current and future operating and capital needs."	Moore, Jennifer (OMB)

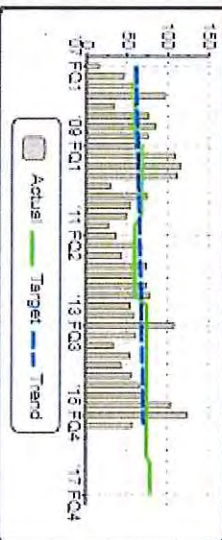
Measures Linked to Objective	Period	Actual	Target	Variance	Owners
Revenue: Total (Water and Sewer)	16 FQ1	\$227,907K	\$182,907K	\$45,000K	Suarez, Maria C. (WASD); Morris, Frances G. (WASD)

Child Measures	Period	Actual	Target	Variance	Owners
Revenue: Camryver (WASD)	16 FQ1	\$63,824K	\$15,959K	\$47,875K	Suarez, Maria C. (WASD); Porumbo, Ileana (WASD); Morris, Frances G. (WASD)
Revenue: Proprietary (WASD)	16 FQ1	\$164,073K	\$161,028K	\$3,047K	Suarez, Maria C. (WASD); Morris, Frances G. (WASD); Porumbo, Ileana (WASD)
Revenue: Interagency/Intracounty (WASD)	16 FQ1	\$0K	\$5,922K	\$5,922K	Suarez, Maria C. (WASD); Porumbo, Ileana (WASD); Morris, Frances G. (WASD)

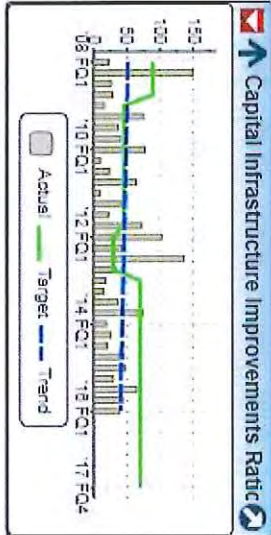
Expend: Total (Water and Sewer)	16 FQ1	\$138,407K	\$182,907K	\$44,500K	Suarez, Maria C. (WASD); Morris, Frances G. (WASD)

Child Measures	Period	Actual	Target	Variance	Owners
Expenditure: Personnel Costs (WASD)	'16 FQ1	\$54,433K	\$53,172K	\$-1,261K	Suarez, Maria C. (WASD); Morris, Frances G. (WASD); Portuondo, Ileana (WASD)
Expenditure: Court Costs (WASD)	'16 FQ1	\$0K	\$0K	\$0K	Suarez, Maria C. (WASD); Portuondo, Ileana (WASD); Morris, Frances G. (WASD)
Expenditure: Contractual Services (WASD)	'16 FQ1	\$18,793K	\$23,816K	\$5,023K	Suarez, Maria C. (WASD); Portuondo, Ileana (WASD); Morris, Frances G. (WASD)
Expenditure: Other Operating (WASD)	'16 FQ1	\$6,830K	\$13,097K	\$6,467K	Suarez, Maria C. (WASD); Portuondo, Ileana (WASD); Morris, Frances G. (WASD)
Expenditure: Charges for County Services (WASD)	'16 FQ1	\$8,641K	\$12,604K	\$2,963K	Suarez, Maria C. (WASD); Portuondo, Ileana (WASD); Morris, Frances G. (WASD)
Expenditure: Capital (WASD)	'16 FQ1	\$527K	\$20,556K	\$20,029K	Suarez, Maria C. (WASD); Morris, Frances G. (WASD); Portuondo, Ileana (WASD)
Expenditure: Transfers Out (WASD)	'16 FQ1	\$0K	\$0K	\$0K	Suarez, Maria C. (WASD); Portuondo, Ileana (WASD); Morris, Frances G. (WASD)
Expenditure: Debt Service (WASD)	'16 FQ1	\$46,383K	\$42,624K	\$-3,659K	Suarez, Maria C. (WASD); Portuondo, Ileana (WASD); Morris, Frances G. (WASD)
Expenditure: Reserves (WASD)	'16 FQ1	\$0K	\$17,128K	\$17,128K	Suarez, Maria C. (WASD); Morris, Frances G. (WASD); Portuondo, Ileana (WASD)
Expenditure: Interdepartmental Transfers (WASD)	'16 FQ1	\$0K	\$0K	\$0K	Suarez, Maria C. (WASD); Portuondo, Ileana (WASD); Morris, Frances G. (WASD)
Capital Improvement Expenditure Ratio (in Percent)	'16 FQ1	57%	75%	-18%	Charan, David (WASD); Morris, Frances G. (WASD)

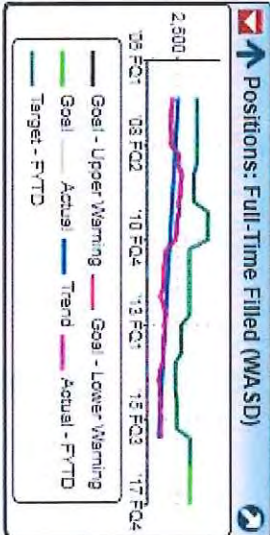
Capital Improvement Expenditure Ratio (in Percent)



Child Measures		Period	Actual	Target	Variance	Owners
Capital Infrastructure Improvements Ratio (in Percent)	✖	'16 FQ1	59%	70%	-11%	Charman, David (WASD); Rao, Kishore K. (WASD)
Capital Purchases Expenditure Ratio in Percent	✖	'16 FQ1	48%	80%	-32%	Charman, David (WASD); Rao, Kishore K. (WASD)
Capital Infrastructure Improvements Ratio (in percent) General Obligation Bonds (GOB) Funds	✖	'16 FQ1	38%	70%	-32%	Charman, David (WASD); Morris, Frances G. (WASD)



Child Measures		Period	Actual	Target	Variance	Owners
Water Capital Infrastructure Improvements Ratio (in Percent) Using GOB Funds	✖	'16 FQ1	39%	70%	-31%	Charman, David (WASD); Rao, Kishore K. (WASD)
Wastewater Capital Infrastructure Improvements Ratio (in percent) Using GOB Funds	✖	'16 FQ1	38%	70%	-32%	Charman, David (WASD); Rao, Kishore K. (WASD)
Positions: Full-Time Filled (WASD)	✖	'16 FQ1	2,324	2,626	-302	Suarez, Marie C. (WASD); Morris, Frances G. (WASD)



Objective

3.1 Continue implementation of water and wastewater system capital projects -

Proceed with planning and construction of water and wastewater capital projects which will modify or enhance existing water distribution system, improve and protect wellfield, and upgrade water and wastewater treatment. These are non-Consent Decree capital projects.

Description

Owners

Vaga, Eduardo A. (WASD);
Goldenberg, Berna M. (WASD);
Yoder, L. Douglas (WASD)

Grandparent Objectives

N11 Responsible growth and a sustainable built environment

Description

Owners

Miami-Dade County

Parent Objectives

N11-1 Promote mixed-use, multi-modal, well designed, and sustainable communities

Description

Owners

Miami-Dade County

N12 Effective infrastructure services

Miami-Dade County

Initiatives Linked to Objective

POCS 10780 - DESIGN BUILD GRAVITY SEWER INTERCEPTORS FOR PUMP STATION NO. 2

Est. Start 1/17/2013 Est. End 3/31/2016

Type

As Of 1/7/2016



%

Status

Owners

Luis, Eduardo M. (WASD);
Abreu, Reynaldo J. (WASD)

POCS 10600 MASTER PUMP STATION 2

1/7/2016



86%

In Progress

Luis, Eduardo M. (WASD);
Abreu, Reynaldo J. (WASD)

Objective

3.2 Provide Stewardship to the CDMP and Zoning Application Process. (WASD)

Provide assessment of water and sewer services as required by the Comprehensive Development Master Plan (CDMP) bi-annual process for Land Use change, and by the monthly zoning application review process conducted by the County's Development of Impact Committee (DIC).

Description

Owners

Valdes, Maria A. (WASD)

Grandparent Objectives

N11 Responsible growth and a sustainable built environment

Description

Owners

Miami-Dade County

Parent Objectives

N11-1 Promote mixed-use, multi-modal, well designed, and sustainable communities

Description

Owners

Miami-Dade County

Measures Linked to Objective

(%) Percent of CDMP comments submitted timely

116 FH2

Period

Actual

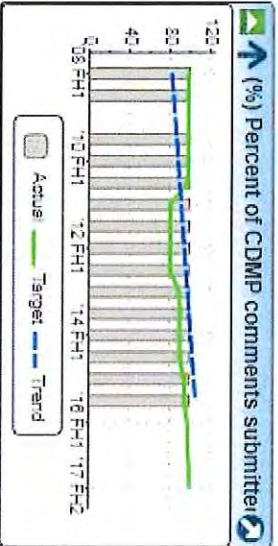
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Target

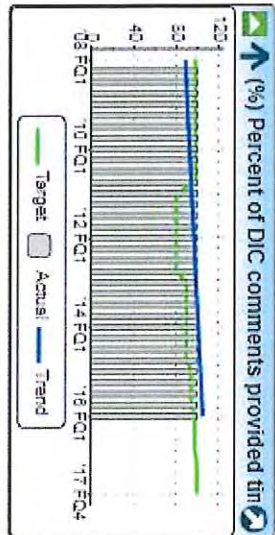
86

Variance

6 Valdes, Maria A. (WASD);
Falcon Jr., Howard J. (WASD)

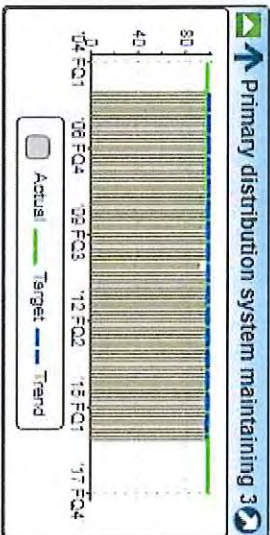


Child Measures					Period	Actual	Target	Variance	Owners
# of COWP applications per cycle					16 FQ1	2	n/a	n/a	Valdes, Maria A. (WASD); Fallon Jr., Howard J. (WASD)
(%): Percent of DIC comments provided timely					16 FQ1	100 (2/2)	98	2	Fallon Jr., Howard J. (WASD); Valdes, Maria A. (WASD)



Child Measures					Period	Actual	Target	Variance	Owners
# of applications evaluated for DIC					16 FQ1	2	n/a	n/a	Valdes, Maria A. (WASD); Fallon Jr., Howard J. (WASD)

Objective	Description	Owners
3.3 Continue to fully comply with drinking water standards (N12-1)	Continue to fully comply with drinking water standards through water treatment and distribution processes.	Aguiar, Luis (WASD); Diaz, Ray (MDCAD)
Grandparent Objectives		
N12 Effective infrastructure services	Description	Owners
Miami-Dade County		
Parent Objectives		
N12-1 Provide adequate potable water supply and waste water disposal	Description	Owners
Miami-Dade County		
Measures Linked to Objective		
Primary distribution system maintaining 35 lbs/psi -WASD	<div><div></div><div>16 FQ1</div></div> <div>Actual99.00%</div> <div>Target99.00%</div> <div>Variance0.00%</div>	OwnersBelawin, Arthur L. (WASD)



Compliance with drinking water standards
(% Days)

Dec '15

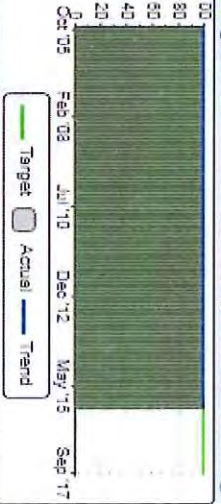
100.00%

100.00%

0.00%

Diaz, Raymond D. (WASD);
Toledo, Andy W.

Compliance with drinking water standards



Child Measures

Collect a minimum of 420 samples per month for total coliform analysis

Maintain TTHM (trihalomethane) levels < 80 ppb

Dec '15

438

n/a

n/a

Toledo, Andy W.;
Diaz, Raymond D. (WASD)

Water Distribution Valves Exercised

16 FQ1

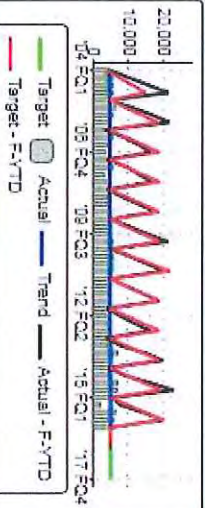
5,637

5,000

637

Matthews, Daniel T. (WASD);
Alfaro, Luis M. (WASD);
Llewellyn, Lancelot (WASD)

WASD Valves Exercised



Objective

3.5 Continue to ensure the proper maintenance and operation of sewage system -Wastewater (N12-1)

Reduce sewage overflows by maintaining 99 percent of pumps in service at pump stations on a daily basis and continue to dispatch emergency calls for sewage overflow, and upgrade wastewater treatment.

Sole, Lester

Owners

Grandparent Objectives

G33-1 Ensure available and reliable systems

N12 Effective infrastructure services

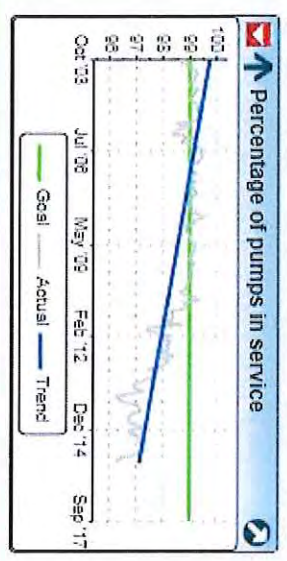
Description

Miami-Dade County

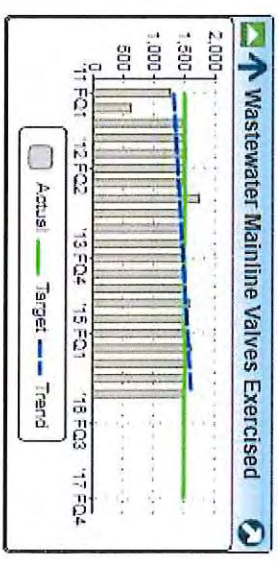
Miami-Dade County

Parent Objectives	Description	Owners
Ensure available and reliable systems (WASD) (GG3-1)		Bernal, Mario R. (WASD)
N12-1 Provide adequate potable water supply and waste water disposal		Adams, Franklin C. (WASD)
		Miami-Dade County

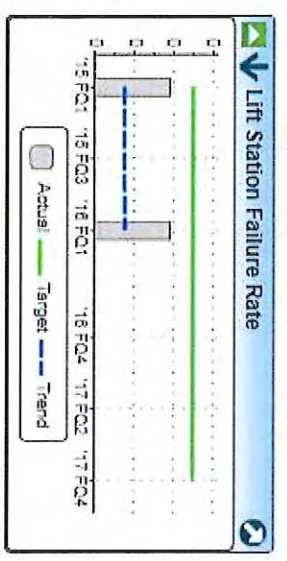
Measures Linked to Objective	Period	Actual	Target	Variance	Owners
Percentage of pumps in service	Dec '15	99.29%	99.00%	-2.71%	Gilambos, Albert D. (WASD)



Wastewater Mainline Valves Exercised	'16 FQ1	1,506	1,500	6	Lowatt, Rodney J. (WASD)
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Lift Station Failure Rate (quarterly)	'16 FQ1	0.10 (1.00/1,047.00)	0.12	0.02	Gilambos, Albert D. (WASD)
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Percent compliance with wastewater standards (FY Quarterly)

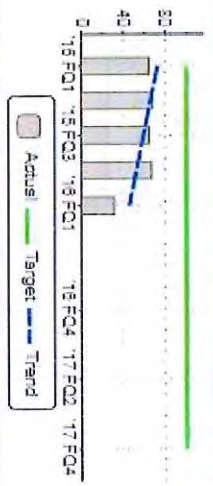
16 FQ1

31.52%
(28.00 / 92.00)

100.00%

-33.48% O'Rourke, Richard M. (WASD);
Torres, Philip (WASD)

Percent compliance with wastewater standards



Child Measures

Percent compliance wastewater effluent limits (Plants)

Period

Actual

Target

Variance

Owners

SCADA Network Availability Ratio

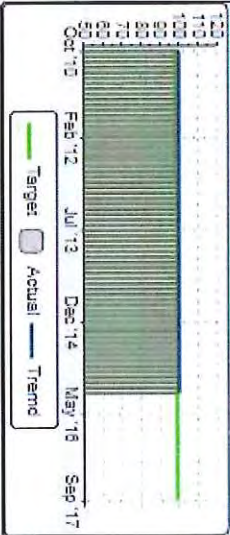
16 FQ1

76.09%
(74.00 / 74.00)

n/a

n/a Fargen, Robert (WASD);
O'Rourke, Richard M. (WASD)

SCADA Network Availability Ratio



Sewer Overflow Rate (Per 100 Miles of Pipe)

16 FQ1

0.58
(32.00 / 6,357.00)

1.00

0.41 Lower, Rodney J. (WASD)

Sewer Overflow Rate (Per 100 Miles of Pipe)



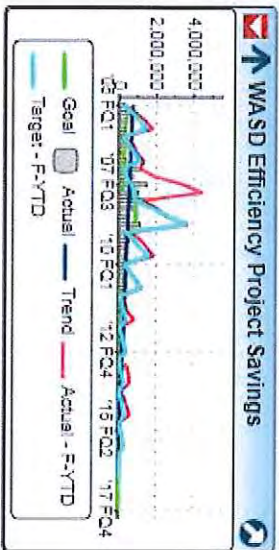
Child Measures	Period	Actual	Target	Variance	Owners
Feet of sewer line cleaned	'16 FQ1	665,124	600,000	65,124	Lowett, Rodney J. (WASD)
Feet of Sanitary Sewer Evaluation Completed (SSSEs)	Dec '15	62,392	125,000	-22,607	Lowett, Rodney J. (WASD)

Objective	Description	Owners
3.6 Continuously Improve Government (WASD)		Goldenberg, Berna M. (WASD)

Grandparent Objectives	Description	Owners
GG6 Green government		Miami-Dade County
zz_2003 Deliver on promises and be accountable for performance	(ESG) Deliver on promises and be accountable for performance	Admin, Admin

Parent Objectives	Description	Owners
Cool Counties Climate Stabilization Fuel Usage	Fuel consumption from WASD bulk fuel purchases, includes Stations-fuel consumption (generators, pumps and pump stations) and Mobile-fuel consumption (vehicle-trucks, heavy equipment, light equipment). Mobile fuel consumption (vehicle-trucks, heavy equipment, light equipment) fueled from GSA managed facilities is reported directly by GSA. The GSA fuel usage is included for monitoring. Under Resolution R-1431-08, approved on December 18, 2008 by the Board of Miami-Dade County Commissioners endorsed Miami-Dade County's Participation in the United States Cool Counties Program and its goals and objectives including the Climate Stabilization Declaration in 2008. The program calls for 80 percent reduction of 2006 greenhouse gas emissions by 2050 including a reduction in fossil fuels.	Goldenberg, Berna M. (WASD)
GG4 Effective management practices		Miami-Dade County
GG6-1 Reduce County government's greenhouse gas emissions and resource consumption		Miami-Dade County
zz_2003 Continuously improving government (priority outcome)	Continuously improving government (priority outcome)	Macon, Jennifer (CONE)

Measures Linked to Objective	Period	Actual	Target	Variance	Owners
WASD Efficiency Project Savings	'16 FQ1	\$27,330	\$50,000	\$-22,670	Unares, Deborah Saez (WASD)



Energy Consumption Efficiency for: Water Supply, Treatment, and Distribution (KWH/MG) (GG3-1)

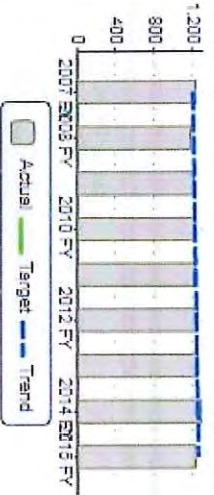
2016 FY

1,229 KWH/MG

n/a

n/a Goldenberg, Bertha M. (WASD); Corp. Emassd (WASD)

Energy Consumption Efficiency for: Waste



2016 FY

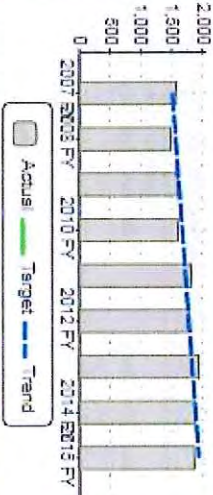
1,869 KWH/MG

n/a

n/a Goldenberg, Bertha M. (WASD); Corp. Emassd (WASD)

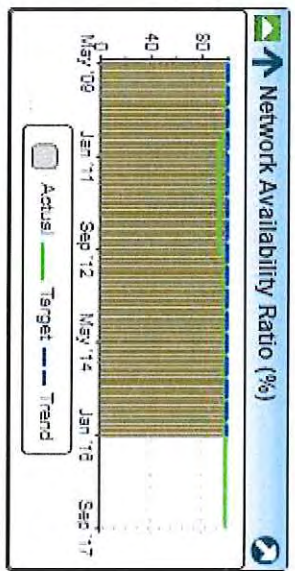
Energy Consumption Efficiency for: Wastewater Collection, Treatment, and Disposal (KWH/MG) (GG3-1)

Energy Consumption Efficiency for: Waste



Objective	Description	Owners
3.8 Ensure available and reliable systems (WASD) (GG3-1)		Bernal, Mario R. (WASD); Adams, Franklin C. (WASD)
Grandparent Objectives	Description	Owners
GG3 Efficient and effective service delivery through technology		Miami-Dade County
Parent Objectives	Description	Owners
GG3-1 Ensure available and reliable systems		Miami-Dade County

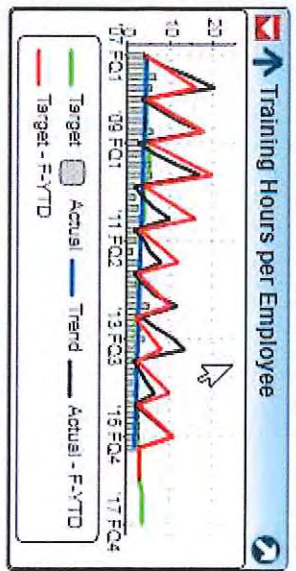
Measures Linked to Objective	Period	Actual	Target	Variance	Owners
Network Availability Ratio (%)	Jan '16	88.98%	89.00%	0.02%	Bernal, Mario R.
		20,781.32 / 20,792.88			



4.0 Learning and Growth

Objective	Description	Owners
4.1 Develop and retain excellent employees and leaders (GG2-2)		
Grandparent Objectives	Description	Owners
GG2 Excellent, engaged workforce		Miami-Dade County
Parent Objectives	Description	Owners
GG2-2 Develop and retain excellent employees and leaders		Miami-Dade County

Measures Linked to Objective	Period	Actual	Target	Variance	Owners
Training Hours per Employee (Quarterly)	'16 FQ1	2.86	3.00	-0.16	Brewer-McDuffie, Cecilia (WASD); Carsoche, Alvaro A. (WASD)
		(8,846.50 / 2,328.00)			



Objective		Description		Owners																																	
4.2 WASD Operations Facts and Figures																																					
Measures Linked to Objective																																					
Total MDWASD Population Served (Potable Water Service)	2015 FY	Actual	Target	Variance	Owners																																
		2,281,793	n/s	n/s	Goldenberg, Bertha M. (WASD); Aguiar, Luis (WASD); Fallon Jr., Howard J. (WASD)																																
<div><div>Total MDWASD Population Served (Potable Water Service)</div><table border="1"><thead><tr><th>Fiscal Year</th><th>Actual</th><th>Target</th><th>Trend</th></tr></thead><tbody><tr><td>2008 FY</td><td>~1,800,000</td><td>~1,800,000</td><td>~1,800,000</td></tr><tr><td>2009 FY</td><td>~1,900,000</td><td>~1,900,000</td><td>~1,900,000</td></tr><tr><td>2010 FY</td><td>~1,950,000</td><td>~1,950,000</td><td>~1,950,000</td></tr><tr><td>2011 FY</td><td>~2,000,000</td><td>~2,000,000</td><td>~2,000,000</td></tr><tr><td>2012 FY</td><td>~1,900,000</td><td>~1,900,000</td><td>~1,900,000</td></tr><tr><td>2013 FY</td><td>~1,850,000</td><td>~1,850,000</td><td>~1,850,000</td></tr><tr><td>2014 FY</td><td>~1,950,000</td><td>~1,950,000</td><td>~1,950,000</td></tr></tbody></table></div>						Fiscal Year	Actual	Target	Trend	2008 FY	~1,800,000	~1,800,000	~1,800,000	2009 FY	~1,900,000	~1,900,000	~1,900,000	2010 FY	~1,950,000	~1,950,000	~1,950,000	2011 FY	~2,000,000	~2,000,000	~2,000,000	2012 FY	~1,900,000	~1,900,000	~1,900,000	2013 FY	~1,850,000	~1,850,000	~1,850,000	2014 FY	~1,950,000	~1,950,000	~1,950,000
Fiscal Year	Actual	Target	Trend																																		
2008 FY	~1,800,000	~1,800,000	~1,800,000																																		
2009 FY	~1,900,000	~1,900,000	~1,900,000																																		
2010 FY	~1,950,000	~1,950,000	~1,950,000																																		
2011 FY	~2,000,000	~2,000,000	~2,000,000																																		
2012 FY	~1,900,000	~1,900,000	~1,900,000																																		
2013 FY	~1,850,000	~1,850,000	~1,850,000																																		
2014 FY	~1,950,000	~1,950,000	~1,950,000																																		
Child Measures																																					
Retail Population Served (Potable Water Service)	2015 FY	Actual	Target	Variance	Owners																																
		1,355,554	n/s	n/s	Goldenberg, Bertha M. (WASD); Edwards, Daniel J. (WASD); Valdes, Maria A. (WASD); Fallon Jr., Howard J. (WASD)																																
Wholesale Population Served (Potable Water Service)	2015 FY	Actual	Target	Variance	Owners																																
		426,239	n/s	n/s	Goldenberg, Bertha M. (WASD); Edwards, Daniel J. (WASD); Fallon Jr., Howard J. (WASD); Valdes, Maria A. (WASD)																																